



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/582,247

06/12/2007

Frits Jurgen Van Hout

081468-0352017

2816

909

7590

10/31/2008

PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

RAYMOND, EDWARD

ART UNIT

PAPER NUMBER

2857

MAIL DATE

DELIVERY MODE

10/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,247	Applicant(s) VAN HOUT ET AL.	
	Examiner Edward Raymond	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20, 22, 23 and 25-34 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060609, 20071026</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-12, 14-20, 22, 23, and 25-34** are rejected under 35 U.S.C. 102(e) as being anticipated by Gelvin et al.

Gelvin et al. teach a sensor arrangement (Claims 1, 12, 22 and 25: see Figure 8) comprising; a substrate (Claims 1, 12, 22 and 25: see Figure 42); a plurality of sensor elements, each sensor provided as an integrated circuit in the substrate (Claims 1, 12, 22 and 25: see Figure 8); electronic circuitry comprising: i) a processing circuit connected to at least one of the sensor element (Claims 1, 12, 22 and 25: see Figure 31), ii) an input/output interface connected to the processing circuit (Claims 1, 12 and 16: see Figure 23); and a power supply unit configured to supply operating power only

to electronic circuitry associated with sensor elements which are in use (Claims 1, 12, 22 and 25: see Figure 15: Power Control).

Gelvin et al. teach a sensor arrangement in which the plurality of sensor elements is distributed over the substrate in a predetermined manner (Claims 2, 13, 23, 26 and 33: see Figure 40).

Gelvin et al. teach a sensor arrangement, in which the electronic circuitry associated with each one of the plurality of sensor elements is distributed over the substrate in a predetermined manner (Claims 3, 14 and 27: see Figure 40).

Gelvin et al. teach a sensor arrangement wherein the sensor is an optical sensor (Claim 4: see Figure 40: Photo sensor).

Gelvin et al. teach a sensor arrangement wherein the substrate is configured to fit into a wafer chuck of a lithographic apparatus (Claims 5, 15, 19 and 29: see Figure 42).

Gelvin et al. teach a sensor arrangement wherein at least one of the processing circuit, the input/output interface, and the power supply unit is provided as an integrated circuit in the substrate (Claims 6 and 30: see Figure 15).

Gelvin et al. teach a sensor arrangement wherein the processing circuit is connected to a memory configured to store at least one among software code and data (Claims 7, 17 and 31: see Figure 38A).

Gelvin et al. teach a sensor arrangement wherein the input/output interface is arranged to exchange data with an external device using a wireless communication technique (Claims 8, 18, 20 and 32: see Figure 23).

Gelvin et al. teach a sensor arrangement, wherein the sensor arrangement further comprises a chuck on which the sensor arrangement is disposed, the chuck being mountable to a wafer stage of a lithographic apparatus (Claim 9 and 14: see Figure 42).

Gelvin et al. teach a sensor arrangement wherein the chuck comprises an interface configured to connect the sensor arrangement to a data network of the lithographic apparatus (Claims 10, 20 and 34: see Figure 42).

Allowable Subject Matter

3. **Claim 13** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. **Claims 21 and 24** are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach a power supply unit configured to supply operating power to at least one other component of the sensor arrangement, wherein the power supply unit is arranged to convert a wireless signal having a first predetermined frequency into a supply voltage for a first part of the sensor arrangement and to convert wireless energy having a second predetermined frequency into a supply voltage for a second part of the sensor arrangement different from the first part.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on M-F 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Raymond/
Primary Examiner
Art Unit 2857

er